Manual on Uniform Traffic Control Devices, M.E, Text of Final Modifications

WAC 468-95-010, General.

The June 2001 Millennium Edition of the Manual on Uniform Streets and Highway for Streets and Highways (MUTCD), published by the Federal Highway Administration and approved by the Federal Highway Administrator as the national standard for all highways open to public travel, was duly adopted by the Washington State Secretary of Transportation. The manual includes in part many illustrations, some of which depend on color for proper interpretation. The code reviser has deemed it inexpedient to convert these regulations and illustrations to the prescribed form and style of WAC and therefore excludes them from publication. The document is available for public inspection at the headquarters office and all regional offices of the Washington state department of transportation. Further, each city, town, and county engineering office in the state will have a copy of the MUTCD, with revisions and modifications for the state of Washington, in its possession.

WAC 468-95-110, Parking for the disabled in urban areas.

Pursuant to RCW <u>46.61.581</u> the following modifications to the MUTCD are established:

(1) A paragraph is added to the standard of MUTCD Section 2B.35, Design of Parking, Standing, and Stopping Signs:

A parking space or stall for a physically disabled person shall be indicated by a vertical sign with the international symbol of access, whose colors are white on a blue background, described under RCW <u>70.92.120</u> and the notice State Disabled Parking Permit Required.

(2) A second Standard is added to MUTCD Section 2B.36 to read:

Signs indicating a parking space or stall for a physically disabled person shall be installed between thirty-six and eighty-four inches off the ground.

WAC 468-95-120, Traffic Signal Signs

Pursuant to RCW 46.61.055 amend the second Standard of MUTCD Section 2B.40 to read:

The NO TURN ON RED sign (R10-11a, R10-11b) shall be used to prohibit any right turn on red; or a left turn on red from a one-way or two way street into a one-way street carrying traffic in the direction of the left turn.

WAC 468-95-130, High Occupancy Vehicle Signs

Amend the fourth paragraph of the Standard of MUTCD Section 2B.50 to read:

For concurrent-flow HOV lanes, ground-mounted HOV signs (R3-11) shall be located at intervals based on engineering judgment. Overhead HOV signs (R3-14) should be used to supplement the ground-mounted HOV signs (R3-11) at intervals based on an engineering study.

WAC 468-95-140, Signing to regional shopping centers.

Pursuant to RCW 47.36.270 a regional shopping center may be signed as a supplemental guide sign destination from state highways in accordance with the applicable sections of MUTCD Part II-D, Guide Signs - Conventional Roads and Part II-E Guide Signs - Freeways and Expressways, and in accordance with subsections (1) through (8) of this section.

- (1) There shall be at least 500,000 square feet of leasable retail floor space;
- (2) There shall be at least three major department stores owned by national or regional retail chain organizations;
- (3) The center shall be located within one highway mile of the state highway;
- (4) The center shall generate at least 9,000 daily one-way vehicle trips to the center;
- (5) Sufficient sign space as specified in the MUTCD shall be available for installation;
- (6) Supplemental follow-through directional signing is required on county roads or city streets at key motorist decision points, if the center is not clearly visible from the point of exit from the state highway. The required supplemental follow-through directional signs shall be installed by the city or county prior to the installation of signs on the state highway;
- (7) Signing on the state highway to a county road or city street that bears the name of the regional shopping center fulfills the statutory requirements for signing to those centers;

(8) The costs of materials and labor for fabricating, installing, and maintaining regional shopping center signs shall be borne by the center.

WAC 468-95-150, No passing zone markings.

Amend the third Standard of MUTCD Section 3B.02, to read:

On two-way, two- or three-lane roadways where centerline markings are installed, nopassing zones shall be established at vertical curves and other locations where an engineering study indicates that passing must be prohibited because of inadequate sight distances or other special conditions.

On two-way, two- and three-lane roadways where centerline markings are installed, no-passing zones shall be established at horizontal curves where an engineering study indicates passing must be prohibited because of inadequate sight distances or other special conditions. A January 17, 2007, compliance date is established.

On three-lane roadways where the direction of travel in the center lane transitions from one direction to the other, a no-passing buffer zone shall be provided in the center lane as shown in Figure 3B-4. A lane transition shall be provided at each end of the buffer zone.

The buffer zone shall be a median island consisting of a lane transition in each direction and a minimum of a 15 m (50 ft) buffer zone. In areas where no-passing zones are required because of limited passing sight distances, the buffer zone shall be the distances between the beginnings of the no-passing zones in each direction.

WAC 468-95-160, Other Yellow Longitudinal Markings

Amend the second Standard of MUTCD Section 3B.03 to read:

If a continuous median island formed by pavement markings separating travel in opposite directions is used, the island may be formed by two single normal solid yellow lines, a combination of two single normal solid yellow lines with yellow crosshatching between the lines with a total width not less than eighteen inches, two sets of double solid yellow lines, or a solid yellow not less than eighteen inches in width. All other markings in the median island area shall be yellow, except crosswalk markings, which shall be white (see MUTCD Section 3B.17).

WAC 468-95-170, White lane line markings

Amend the third Standard of MUTCD Section 3B.04 to read:

Where crossing is prohibited, the lane line markings shall consist of two normal solid white lines or a single wide white line, supplemented with lane change prohibition signing.

WAC 468-95-180, Other white longitudinal pavement markings

Amend MUTCD Section 3B.05, to change the dimensions shown on figure 3B-10 for drop lane markings from 3' markings with a 9' gap to 3' markings with a 12' gap.

WAC 468-95-190, Pavement edgelines and raised pavement markers supplementing other markings

Pursuant to RCW <u>47.36.280</u>, the Standard in MUTCD Section 3B.07, is revised as follows:

Edge lines shall be used on all interstate highways, on rural multilane divided highways, on all principal arterials and minor arterials within urbanized areas, except when curb or sidewalk exists, and may be used on other classes of roads. Jurisdictions shall conform to these requirements at such time that it undertakes to renew or install permanent markings on new or existing roadways. The lines shall be white except that on the left edge of each roadway of divided streets and highways and one-way roadway in the direction of travel, the lines shall be yellow.

These standards shall be in effect, as provided in this section, unless the legislative authority of the local governmental body finds that special circumstances exist affecting vehicle and pedestrian safety that warrant a site-specific variance.

Pursuant to RCW 47.36.280, the first paragraph under Option of MUTCD Section 3B.13 is revised to read as follows:

Raised pavement markers may also be used to supplement other markings for channelizing islands or approaches to other objects. The general use of raised pavement markers along right edge lines is strongly discouraged because they can cause steering difficulties and make bicyclists lose control of their vehicles. Raised or recessed pavement markers may be used along right edge lines on the taper in lane transition

sections, on approaches to objects and within channelization at intersections. Raised or recessed pavement markers can only be used along right edge lines at other locations where an engineering study has determined the markers are essential to preserving pedestrian, bicycle, and motor vehicle safety. At the initiation of the engineering study, local bicycling organizations, the regional member of the State Bicycling Advisory Committee, or the WSDOT bicycle and pedestrian program manager shall be notified of the study for review and comment. Positioning and spacing of the markers in such cases must be determined by engineering judgment taking into consideration their effect on bicycle, pedestrian, and motor vehicle safety. Other applications of raised or recessed pavement markers along right edge lines of arterials are considered to be nonconforming with this section. Cities and counties shall remove nonconforming raised pavement markings at the time that they prepare to resurface roadways, or earlier at their option.

These standards shall be in effect, as provided in this section, unless the legislative authority of the local governmental body finds that special circumstances exist affecting vehicle and pedestrian safety that warrant a site-specific variance.

WAC 468-95-200, Approach markings for obstructions

Amend the first Standard of MUTCD Section 3B.10 to read:

Pavement markings shall be used to guide traffic away from fixed obstructions within a paved roadway. Approach markings for bridge supports, refuge islands, median islands, and channelization islands (except channelization islands formed by paint stripes or raised pavement markers) shall consist of a diagonal line or lines extending from the centerline or the lane line to a point 0.3 to 0.6 m (1 to 2 ft) to the right side, or to both sides, of the approach end of the obstruction (see Figure 3B-13).

Amend the third Standard of MUTCD Section 3B.10 to read:

If traffic is required to pass only to the right of the obstruction, the markings shall consist of a no-pass marking, approaching the obstruction, at least twice the length of the diagonal portion as determined by the appropriate taper formula (see Figure 3B-13).

Modify MUTCD Figure 3B-13, Item a – Center of two-lane road, to show a single nopass marking on the approach to the obstruction.

WAC 468-95-210, Raised pavement markers substituting for pavement markings

Amend the first sentence in the first Standard of MUTCD Section 3B.14 to read:

If raised pavement markers are substituted for broken line markings, a group of 3 to 5 markers equally spaced at no greater than N/8 (see section 3A.06), or at the one-third points of the line segment if N is other than 12 m (40 ft), with a least one retroreflective or internally illuminated marker used per group.

WAC 468-95-220, Stop line locations

Amend the second Guidance of MUTCD Section 3B.16 to read:

Stop or yield lines, where used, should ordinarily be placed four feet in advance of and parallel to the nearest crosswalk line. In the absence of a marked crosswalk, the stop or yield line should be placed at the desired stopping point, in no case less than 4 feet from the nearest edge of intersecting roadway.

Stop lines at midblock signalized locations should be placed at least 40 feet in advance of the nearest signal indication (see MUTCD Section 4D.15).

WAC 468-95-230, Crosswalk markings

Amend the second Guidance in MUTCD Section 3B.17 to read:

If used, the diagonal or longitudinal lines should form a 24 inch wide marking pattern consisting of two 8 inch wide markings separated by an 8 inch wide gap or a 24 inch wide solid marking pattern. The marking patterns should be spaced 12 to 60 inches apart but with the maximum gap between marking patterns not to exceed 2.5 times the marking pattern width. Longitudinal marking patterns should be located to avoid the wheel paths and should be oriented parallel with the wheel paths.

WAC 468-95-240, Preferential lane longitudinal markings for motorized vehicles

Amend the second Standard of MUTCD Section 3B.23, item C.1 to read:

A double solid wide white line or a single wide white line, supplemented with lane change prohibition signing where crossing is prohibited (see Figure 3B-25b and 3B-25c).

Amend the second Standard of MUTCD Section 3B.23, item D. 4 to read:

A single dotted normal white line or a single dotted wide white line is permitted for any vehicle to perform a right turn maneuver (See Figure 3B-25b).

Amend all references in Table 3B-2 for double wide white line to allow single solid wide white line, each with lane change prohibition signing.

Amend the callout in figure 3B-25 for a SINGLE DOTTED NORMAL WHITE on the approach to the limited access exit, side-street, or commercial entrance to say SINGLE DOTTED NORMAL WHITE or SINGLE DOTTED WIDE WHITE.

WAC 469-95-250, Meaning of Signal Indications

Pursuant to RCW 46.61.055, amend the second paragraph of the Standard of MUTCD Section 4D.04, item C1 to read:

Vehicle operators facing a steady circular red signal may, after stopping, proceed to make a right turn from a one-way or two-way street into a two-way street or into a one-way street carrying traffic in the direction of the right turn: or a left turn from a one-way or two-way street into a one-way street carrying traffic in the direction of the left turn: unless a sign posted by a competent authority prohibits such movement. Vehicle operators planning to make such turns shall remain stopped to allow other vehicles lawfully within or approaching the intersection control area to complete their movements. Vehicle operators planning to make such turns shall also remain stopped for pedestrians who are lawfully within the intersection control area.

Pursuant to RCW 46.61.055, amend the MUTCD Section 4D.04, item C2 of read:

Vehicle operators facing a steady red arrow indication may, after stopping, proceed to make a right turn from a one-way or two-way street or into a one way street carrying traffic in the direction of the right turn, or a left turn from a one-way street or two-way street into a one-way street carrying traffic in the direction of the left turn, unless a sign posted by a competent authority prohibits such movement. Vehicle operators planning to make such turns shall remain stopped to allow other vehicles lawfully within or approaching the intersection control area to complete their movements. Vehicle operators planning to make such turns shall also remain stopped for pedestrians who are lawfully within the intersection control area.

WAC 468-95-260, Application of Steady Signal Indications

Pursuant to RCW 46.61.055, amend MUTCD Section 4D.05, item D of to read:

A steady RED ARROW signal indication shall be displayed when it is intended to prohibit vehicular traffic from entering the intersection or other controlled area to make the indicated turn when regulatory signing is in place prohibiting such movement. Pedestrians directed by a pedestrian signal head may enter the intersection or other controlled area.

WAC 468-95-270, Meaning of lane-use control indications

Pursuant to RCW 46.61.072, amend MUTCD Section 4J.02 paragraph B to read:

A steady YELLOW X or a flashing RED X means that a driver should prepare to vacate, in a safe manner, the lane over which the signal is located because a lane control change is being made, and to avoid occupying that lane when a steady RED X is displayed.

WAC 468-95-280, Operation of lane-use control signals

Pursuant to RCW 46.61.072, in MUTCD Section 4J.04, amend the first sentence of the first paragraph after item G to read:

A moving condition in one direction shall be terminated either by the immediate display of a RED X signal indication or by a YELLOW X signal indication followed by a RED X signal indication or a flashing RED X indication followed by a RED X indication.

WAC 468-95-290, County Road Signing

Pursuant to RCW <u>36.75.300</u>, there is added to Part 5 of the MUTCD, the following regulation pertaining to signing of county roads:

The legislative authority of each county may by resolution classify and designate portions of county roads as primitive roads where the designated road portion:

- (1) Is not classified as part of the county primary road system, as provided for in RCW 36.86.070;
- (2) Has a gravel or earth driving surface; and

(3) Has an average annual daily traffic of 100 or fewer vehicles.

Any road designated as a primitive road shall be marked with a PRIMITIVE ROAD sign at all places where the primitive road portion begins or connects with a highway other than a primitive road.

A sign with the caption CAUTION - NO WARNING SIGNS may be installed on the same post with the PRIMITIVE ROAD sign, and may be individually erected at intermediate points along the road section if conditions warrant. In addition, a sign with the caption NEXT MILES may be installed on the same post below the CAUTION - NO WARNING SIGNS sign.

WAC 468-95-300, Temporary Traffic Control

Amend MUTCD Section 6C.04, Table 6C-1 and MUTCD Section 6H.01, Table 6H-3 to read:

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Freeways & expressways	55/70 MPH	1500' ± or per MUTCD
Rural Highways	60/65 mph	1000′ +/-
Rural Roads	45/55 MPH	500' +/-
Rural Roads & Urban	35/40 MPH	350' +/-
Arterials		
Rural Roads, Urban	25/30 MPH	200' +/- (2)
Streets, Residential		
Business Districts		
Urban Streets	25 mph or less	100' +/-(2)

⁽¹⁾ All spacing may be adjusted to accommodate interchange ramps, at-grade intersections, and driveways.

WAC 468-95-310, Temporary pavement markings

Amend the first Support of MUTCD Section 6F.66 to read:

Temporary pavement markings are those that may be used until it is practical and possible to install permanent pavement markings that meet MUTCD standards. Normally, it should not be necessary to leave temporary pavement markings in place for more than 2 weeks, except on roadways being paved with bituminous surface

⁽²⁾ This spacing may be reduced in urban areas to fit roadway conditions.

treatment (BST) and having traffic volumes under 2,000 ADT. All temporary pavement markings, including pavement markings for no-passing zones, shall conform to the requirements of sections 3A and 3B.

Amend the first Guidance of MUTCD Section 6F.66 to read:

For temporary situations of 14 calendar days or less, for a two-lane or three-lane road, no-passing zones may be identified by using W 14-3 No Passing Zone signs (see Section 2C.32) rather than pavement markings (See Section 3B.02). Signs may also be used in lieu of pavement markings on low-volume roads for longer periods, when this practice is in keeping with the state's or other highway agency's policy. These signs should be placed in accordance with Sections 2B-24 and 2B.25

WAC 468-95-320, School Advance Warning Sign (S-1)

Amend MUTCD Section 7B.08, Figure 7B-1 by deleting the words SCHOOL PROPERTY LINE and replacing with the words SCHOOL GROUNDS.

Amend MUTCD Section 7B.08, Figure 7B-1 to show the school zone 300 feet on either side of the marked school crosswalk.

WAC 468-95-330, School Speed Limit Assembly (S4-1, S4-2, S4-3, S4-4, S5-1)

Pursuant to RCW 46.61.440 delete the first Guidance paragraph and add the following paragraph to the first Standard of MUTCD Section 7B.11:

The reduced school speed zone shall begin at a point 90m (300 ft) in advance of the crosswalk and end at appoint 90 m (300 ft) after the crosswalk. These distances may be modified to fit the field conditions by regulation.

WAC 468-95-340, School Speed Limit Assembly (S4-1, S4-2, S4-3, S4-4, S5-1)

Amend the Option to the second Standard of MUTCD Section 7B.11 to read:

The School Speed Limit assembly shall be either a fixed-message sign assembly or a changeable message sign. The fixed-message School Speed Limit assembly shall consist of a top plaque (S4-3) with the legend SCHOOL, a Speed Limit (R2-1) sign, and a bottom plaque (S4-1, S4-2, S4-4, or S4-501) indicating the specific periods of the day and/or days of the week that the special school speed limit is in effect.

WAC 468-95-350, When children are present

Amend MUTCD Section 7B.11 by adding the following supplemental paragraph to the second Standard:

The supplemental or lower panel of a School Speed Limit 20 sign which reads When Children are Present shall indicate to the motorist that the 20 mile per hour school speed limit is in force under any of the following conditions:

- (1) School children are occupying or walking within the marked crosswalk.
- (2) School children are waiting at the curb or on the shoulder of the roadway and are about to cross the roadway by way of the marked crosswalk.
- (3) School children are present or walking along the roadway, either on the adjacent sidewalk or, in the absence of sidewalks, on the shoulder within the posted school speed limit zone extending 300 feet, or other distance established by regulation, in either direction from the marked crosswalk.

WAC 468-95-360, Crosswalk Markings

Amend the second Guidance of MUTCD Section 7C.03 to read:

If used, the diagonal or longitudinal lines should form a 24 inch wide marking pattern consisting of two 8 inch wide markings separated by an 8 inch wide gap or a 24 inch wide solid marking pattern. The marking patterns should be spaced 12 to 60 inches apart but with the maximum gap between marking patterns not to exceed 2.5 times the marking pattern width. Longitudinal marking patterns should be located to avoid the wheel paths and should be oriented parallel with the wheel paths.

WAC 468-95-370, Pavement markings for obstructions

Amend MUTCD Section 9C.07, Figure 9C.07, to show a normal solid white line instead of a wide solid white line.

WAC 468-95-400

The following MUTCD sections are adopted as modified herein, until Revision 2 to the June 2001 Millennium Edition of the MUTCD is adopted by the Washington State Secretary of Transportation:

(1) Section 2A.15, Sign Borders

Amend the Standard to read:

Unless specifically stated otherwise, each sign illustrated herein shall have a border of the same color as the legend, at or just inside the edge. The corners of all sign borders shall be rounded, except for STOP signs.

Amend the Guidance to read:

A dark border on a light background should be set in from the edge, while a light border on a dark background should extend to the edge of the panel. A border for 750 mm (30 in) signs with a light background should be from 13 to 19 mm (0.5 to 0.75 in) in width, and 13 mm (0.5 in) from the edge. For similar size signs with a light border, a border width of 25 mm (1 in) should be used. For other sizes, the border width should be of similar proportions, but should not exceed the stroke-width of the major lettering of the sign. On signs exceeding $1800 \times 3000 \text{ mm}$ (72 x 120 in) in size, the border should be 50 mm (2 in) wide. For signs larger than $1800 \times 3000 \text{ mm}$ (72 x 120 in), the border should be 75 mm (3 in) wide. Where practical, the corners of the sign should be rounded parallel the border, except for STOP sign corners which are not rounded.

(2) Section 2A.19, Lateral Offset

Change the first Standard to read:

For overhead sign supports (cantilever or sign bridges), the minimum lateral offset from the edge of the shoulder (or if no shoulder exists, from the edge of the pavement) to the near edge of the supports shall be 1.8 m (6 ft).

Overhead sign supports shall have a barrier or crash cushion to shield them if they are within the clear zone.

Roadside-mounted sign supports shall be breakaway, yielding, or shielded with a longitudinal barrier or crash cushion if within the clear zone.

(3) Section 2C.04 Page 2C-4, Table 2C-2, Warning Sign Sizes.

Replace the table with the following:

Table 2C-2. Warning Sign Sizes

D						
Des	Sign Series	Conventional Roads	Express- ways	Freeways	Minimum	Oversized
Shape						
Diamond	W1, W2, W7, W8, W9, W11, W14, W15-1, W17-1	750 x 750 (30 x 30)	900 x 900 (36 x 36)	1200 x 1200 (48 x 48)	600 x 600 (24 x 24)	
Diamond	W3, W4, W5, W6, W8-3, W10, W12	900 x 900 (36 x 36)	1200 x 1200 (48 x 48)	1200 x 1200 (48 x 48)	750 x 750 (30 x 30)	
Rectangular	W1 -Arrows	1200 x600 (48 x 24)			900x450 (36 x 18)	1500 x 750 (60 x 30)
	W1 - Chevron	450 x 600 (18 x 24)	750 x 900 (30 x 36)	900 x1200 (36 x 48)	300 x 450 (12 x 18)	,
Rectangular	W7-4	1950x 1200 (78 x 48)	1950x1200 (78 x 48)	1950x1200 (78 x 48)	,	
	W7-4a, b, c	1950x 1500 (78 x 60)	1950x1500 (78 x 60)	1950x1500 (78 x 60)		
	W10-9, W10-10	750 x 225 (30x9)	,			
	W12-2P	2100 x 600 (84 x 24)	2100 x 600 (84 x 24)	2100 x 600 (84 x 24)		
	W13, W25	600 x 750 (24 x 30)	900 x 1200 (36 x 48)	1200 x 1500 (48 x 60)	600 x 750 (24 x 30)	1200 x 1500 (48 x 60)
Pennant	W14-3	900 x 1200 x 1200 (36 x 48 x 48)			750 x 1000 x 1000 (30 x40 x 40)	1200 x 1600 x 1600 (48 x 64 x 64)
Circular	W10-1	900 (36) Dia.	1200 (48) Dia.		750 (30) Dia.	1200 (48) Dia.

Notes: 1. Larger signs may be used when appropriate

2. Dimensions are shown in millimeters followed by inches in parentheses and are shown as width x height

(4) Section 2C.05, Table 2C-4, Guidelines for Advance Placement of Warning Signs (English Units).

Replace the table and notes with the following:

Table 2C-4. Guidelines for Advance Placement of Warning Signs (English Units)

		Advance Placement Distance 1							
Posted or 85th-Percentil e Speed reduction and lane changing in heavy traffic²	Condition B: Deceleration to the listed advisory speed (mph) for the condition⁴								
	O ³	10	20	30	40	50	60	70	
20 mph	225 ft	N/A ⁵	N/A ⁵	-	-	-	-		-
25 mph	325 ft	N/A ⁵	N/A ⁵	N/A ⁵	_	-	_		
30 mph	450 ft	N/A ⁵	N/A ⁵	N/A ⁵	-	-	-		_
35 mph	550 ft	N/A ⁵	N/A ⁵	N/A ⁵	N/A ⁵	-	_	_	-
40 mph	650 ft	125 ft	N/A ⁵	N/A⁵	N/A ⁵	_	<u> </u>		_
45 mph	750 ft	175 ft	125 ft	N/A ⁵	N/A ⁵	N/A ⁵	-	_	_
50 mph	850 ft	250 ft	200 ft	150 ft	100 ft	N/A ⁵	_	_	_
55 mph	950 ft	325 ft	275 ft	225 ft	175 ft	100 ft	N/A ⁵	-	
60 mph	1100 ft	400 ft	350 ft	300 ft	250 ft	175 ft	N/A ⁵	_	_
65 mph	1200 ft	475 ft	425 ft	400 ft	350 ft	275 ft	175 ft	N/A ⁵	
70 mph	1250 ft	550 ft	525 ft	500 ft	425 ft	350 ft	250 ft	150 ft	_
75 mph	1350 ft	650 ft	625 ft	600 ft	525 ft	450 ft	350 ft	250 ft	100 ft

Notes:

- ¹ The distances are adjusted for a sign legibility distance of 50 m (175 ft) for Condition A. The distances for Condition B have been adjusted for a sign legibility distance of 75 m (250 ft), which is appropriate for an alignment warning symbol sign.
- ² Typical conditions are locations where the road user must use extra time to adjust speed and change lanes in heavy traffic because of a complex driving situation. Typical signs are Merge, Right Lane Ends, etc. The distances are determined by providing the driver a PIEV time of 14.0 to 14.5 seconds for vehicle maneuvers (2001 AASHTO Policy, Exhibit 3-3, Decision Sight Distance, Avoidance Maneuver E) minus the legibility distance of 50 m (175 ft) for the appropriate sign.
- ³ Typical condition is the warning of a potential stop situation. Typical signs are Stop Ahead, Yield Ahead, Signal Ahead, and Intersection Advance Warning signs. The distances are based on the 2001 AASHTO Policy, Stopping Sight Distance, Exhibit 3-1, providing a PIEV time of 2.5 seconds, a deceleration rate of 3.4 m/second² (11.2 ft/second²), minus the sign legibility distance of 50 m (175 ft).
- ⁴ Typical conditions are locations where the road user must decrease speed to maneuver through the warned condition. Typical signs are Turn, Curve, Reverse Turn, or Reverse Curve. The distance is determined by providing a 2.5 second PIEV time, a vehicle deceleration rate of 3 m/second² (10 ft/second²), minus the sign legibility distance of 75 m (250 ft).
- 5 No suggested minimum distances are provided for these speeds, as the placement location is dependent on site conditions and other signing to provide an adequate advance warning for the driver.

Replace the entire Section text with the following:

Option:

The CROSS TRAFFIC DOES NOT STOP (W4-4) plaque (see Figure 2C-9) may be used in combination with a STOP sign when engineering judgment indicates that drivers frequently misinterpret the intersection to be a multi-way stop condition.

Standard:

If the W4-4 plaque is used, it shall be installed below the STOP sign.

(6) Section 2C.28 Merge Signs (W4-1, W4-1a)

W4-2 Lane End sign is included in MUTCD Revision 2 Section 2C.30.

(7) Section 2C.34 Intersection Warning Signs (W2-1 through W2-6)

Amend the section to read:

Option:

A Cross Road (W2-1) symbol, Side Road (W2-2 or W2-3) symbol, T-Symbol (W2-4), or Y-Symbol (W2-5) sign (see Figure 2C-9) may be used in advance of an intersection to indicate the presence of an intersection and the possibility of turning or entering traffic. The relative importance of the intersecting roadways may be shown by different widths of lines in the symbol.

The Circular Intersection (W2-6) symbol sign accompanied by an educational word message plaque may be installed in advance of a circular intersection.

An advance street name plaque (see Section 2C.45) may be installed below an Intersection Warning sign.

Guidance:

The Intersection Warning sign should illustrate and depict the general configuration of the intersecting roadway, such as cross road, side road, T-intersection, or Y-intersection. Where the side roads are not opposite of each other, the symbol for the intersection should indicate a slight offset.

Intersection Warning signs, other than the Circular Intersection symbol (W2-6) sign should not be used on approaches controlled by STOP signs, YIELD signs, signals, or where Junction signing (see Sections 2D.13 and 2D.28) or advance route turn assembly signs (see Section 2D.29) are present. The Circular Intersection symbol (W2-6) sign should be installed on the approach to a roundabout intersection controlled by a YIELD sign.

(8) Section 2C.37 Crossing Signs (W11-1, W11-2, W11-2, W11-3, W11-4, W16-7P)

Rename and replace the entire section with the following:

Section 2C.37 Nonvehicular Signs (W11-1, W11-2, W11-3, W11-4, W11-11, W11-14, W11-14a, W11-15)

Option:

Nonvehicular signs (see Figure 2C-10) may be used to alert road users in advance of locations where unexpected entries into the roadway or shared use of the roadway by pedestrians, bicyclists, golf carts, animals, horse-drawn vehicles, and other crossing activities might occur.

Support:

These conflicts might be relatively confined, or might occur randomly over a segment of roadway.

Option:

When used in advance of a crossing, Nonvehicular warning signs may be supplemented with supplemental plaques (see Section 2C.39) with the legend AHEAD, XX METERS (XX FEET), or NEXT XX KILOMETERS (NEXT XX MILES) to provide advance notice to road users of possible crossing activity.

Standard:

When used at the crossing, Nonvehicular warning signs shall be supplemented with a diagonal downward pointing arrow (W16-7) plaque (see Figure 2C-10) showing the location of the crossing.

Option:

The crossing location may be defined with crosswalk markings (see Section 3B.17). Pedestrian, Bicycle, School Advance Crossing, and School Crossing signs and their related supplemental plaques may have a fluorescent yellow-green background with a black legend and border.

Guidance:

When a fluorescent yellow-green background is used, a systematic approach featuring one background color within a zone or area should be used. Mixing standard yellow and fluorescent yellow-green backgrounds within a selected site area should be avoided.

Nonvehicular signs should be used only at locations where the crossing activity is unexpected or at locations not readily apparent.

(9) Section 2C.46 Dead End/No Outlet Plaques (W14-1P, W14-2P)

Amend the section to read:

Option:

DEAD END (W14-1P) or NO OUTLET (W14-2P) plaques (see Figure 2C-11) may be used in combination with Street Name (D3-1) signs (see Section 2D.38) to warn turning traffic that the cross street ends in the direction indicated by the arrow.

At locations where the cross street does not have a name, DEAD END or NO OUTLET plaques may be used alone in place of a street name sign.

(10) Section 3B.13 B1 Raised Pavement Markers Supplementing Other Markings

Under Guidance, amend the section to read:

B. Longitudinal Spacing

- 1. When supplementing solid line markings, raised pavement markers at a spacing no greater than N (see Section 3A.06) should be used, except when supplementing left edge line markings a spacing no greater than N/2 should be used. Raised markers should not supplement right edge line markings, unless they are spaced closely enough (no greater than 3m (10 ft) apart) to approximate the appearance of a solid line.
- 2. When supplementing broken line markings, a spacing no greater than 3N should be used. However, when supplementing broken line markings identifying reversible lanes, a spacing no greater than N should be used.
- 3. When supplementing dotted line markings, a spacing appropriate for the application should be used.
- 4. When supplementing longitudinal line markings through at-grade intersections, one raised pavement marker for each short line segment should be used.
- 5. When supplementing edge line extensions through freeway interchanges, a spacing of N should be used.

(11) Section 3B.24 Markings for Roundabouts

Replace Figure 3B-27, Typical Markings for Roundabouts with Two Lanes, with the same figure in MUTCD Revision 2 available at http://mutcd.fhwa.dot.gov/pdfs/millennium/pr2/3r2.pdf. Page 69.

(12) Section 3B.25 General

Amend the section to read:

Support:

When used for guidance or regulation of traffic, colored pavements are traffic control devices. Colored pavements also are sometimes used to supplement other traffic control devices. Colored pavement located between crosswalk lines to emphasize the presence of the crosswalk is not considered to be a traffic control device.

Guidance:

Colored pavements used as traffic control devices should be used only where they contrast significantly with adjoining paved areas. Colors that degrade the contrast of white crosswalk lines, or that might be mistaken by road users as a traffic control application, should not be used for colored pavement located between crosswalk lines.

Standard:

Colored pavements shall not be used as a traffic control device, unless the device is applicable at all times. Colored pavements used as traffic control devices shall be limited to the following colors and applications:

A. Yellow shall be used only for flush or raised median islands separating traffic flows in opposite directions.

B. White shall be used for delineation on shoulders, and for flush or raised channelizing islands where traffic passes on both sides in the same direction of travel.

(13) Section 4D.18-2 Design, Illumination, and Color of Signal

Delete the entire last Guidance.

(14) Section 7A.04 Scope.

Under the Standard, delete the second paragraph.

(15) Section 7B.01 Size of School Signs

Replace Table 7B-1 size of School Signs with the following figure:

Table 7B-1. Size of School Area Signs and Plaques

0.	MUTCD Code	Conventional Roads			
Sign		Minimum	Standard	Special	
School Crossing	S1-1	750 x 750 mm (30 x 30 in)	900 x 900 mm (36 x 36 in)	1200 x 1200 mm (48 x 48 in)	
School Bus Stop Ahead	S3-1	750 x 750 mm (30 x 30 in)	750 x 750 mm (30 x 30 in)	900 x 900 mm (36 x 36 in)	
School Speed Limit Ahead	S4-5, S4-5a	750 x 750 mm (30 x 30 in)	900 x 900 mm (36 x 36 in)	1200 x 1200 mm (48 x 48 in)	
School Speed Limit XX When Flashing (English)	S5-1	600 x 1200 mm (24 x 48 in)	900 x 1800 mm (36 x 72 in)	1200 x 2400 mm (48 x 96 in)	
School Speed Limit XX When Flashing (Metric)	S5-1	600 x 1350 mm (24 x 54 in)	900 x 1950 mm (36 x 78 in)	1200 x 2550 mm (48 x 102 in)	
End School Zone	S5-2	600 x 750 mm (24 x 30 in)	900 x 1125 mm (36 x 45 in)	1200 x 1500 mm (48 x 60 in)	
Speed Limit (School Use) (English)	R2-1	600 x 750 mm (24 x 30 in)	900 x 1125 mm (36 x 45 in)	1200 x 1500 mm (48 x 60 in)	
Speed Limit (School Use) (Metric)	R2-1	600 x 900 mm (24 x 36 in)	900 x 1275 mm (36 x 51 in)	1200 x 1650 mm (48 x 66 in)	

Diagua	митср	Conventional Roads				
Plaque	Code	Minimum	Standard	d Special		
8:30 AM TO 5:30 PM	S4-1	600 x 250 mm (24 x 10 in)	900 x 375 mm (36 x 15 in)	1200 x 500 mm (48 x 20 in)		
When Children Are Present	S4-2	600 x 250 mm (24 x 10 in)	900 x 375 mm (36 x 15 in)	1200 x 500 mm (48 x 20 in)		
School	S4-3	600 x 200 mm (24 x 8 in)	900 x 300 mm (36 x 12 in)	1200 x 400 mm (48 x 16 in)		
When Flashing	S4-4	600 x 250 mm (24 x 10 in)	900 x 375 mm (36 x 15 in)	1200 x 500 mm (48 x 20 in)		
XXX FT or XXX M	W16-2	600 x 300 mm (24 x 12 in)	750 x 375 mm (30 x 15 in)	900 x 450 mm (36 x 18 in)		
XXX Feet or XXX Meters	W16-2a	600 x 450 mm (24 x 18 in)	750 x 525 mm (30 x 21 in)	900 x 600 mm (36 x 24 in)		
Ahead	W16-9p	600 x 250 mm (24 x 10 in)	900 x 375 mm (36 x 15 in)	1200 x 500 mm (48 x 20 in)		
Diagonal Arrow	W16-7	600 x 300 mm (24 x 12 in)	750 x 375 mm (30 x 15 in)	900 x 450 mm (36 x 18 in)		

(16) Section 7B.07, Sign Color for School Warning Signs.

Under Option D, amend the reference to the School Speed Limit sign (S5-1) to become a reference to the SCHOOL portion of the School Speed Limit sign (S5-1).

(17) Section 9B.04, Bicycle Lane Signs (R3-16, R3-17)

Amend the Standard to read:

The BIKE LANE (R3-17) sign (see Figure 9B-2) shall be used only in conjunction with marked bicycle lanes as described in Chapter 9C, and shall be placed at periodic intervals along the bicycle lanes.